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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/655,595	09/06/2000	William F. Beausoleil	POU9-2000-0045-US1	9321

34313 7590 03/29/2004

ORRICK, HERRINGTON & SUTCLIFFE, LLP  
4 PARK PLAZA  
SUITE 1600  
IRVINE, CA 92614-2558

EXAMINER
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STEVENS, THOMAS H

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 03/29/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/655,595

Applicant(s)

BEAUSOLEIL ET AL.

Examiner

Thomas H. Stevens

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/6/00.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings filed on 09/06/00 are objected to by the Draftsperson under 37 CFR 1.84 or 1.1.52 for the following reasons:

- Figures 1-4—Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality).
- Figure 4—Margins not acceptable.

The examiner will require submission of new, corrected drawings when necessary.

### ***Specification Objections***

2. The applicant needs to fill out the serial numbers for the cross-reference applications; similarly on page 5, line 8.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase, "a multi-conductor, straight through, cable with inputs" is vague.

***Claim Rejections - 35 USC § 103***

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable by Sample et al. (U.S. Patent 5,644,515 (1997)) in view of Lin (U.S. Patent 6,421,251 (1998)).

Sample et al. teaches a system for physical emulation of electronic circuits or systems, which include a data entry workstation where a user may input data representing the circuit or system configuration (abstract); but doesn't teach test pattern/signaling, nor interchanging conductors/wires.

Lin teaches simulation and emulation in both software and hardware to verify electronic systems (BSTX 3; DETX 49, lines 3-5); as well as wire interconnection information (DETX 545).

At the time of invention was made, it would have been obvious of to one of ordinary skill in the art to modify the teachings of Sample et al. in view of Lin since in would be advantageous to emulate a specified signal and make the necessary wiring changes so as to optimize the circuit via emulation.

**Claim 1:** In an emulator that includes printed circuit boards interconnected (Sample: abstract) by a multi-conductor, straight through, cable with inputs at one end of the cable and corresponding outputs at the other cable end, an in situ method for determining the length of the cable, including the steps of: prior to installing the cable, interchanging the inputs or outputs of at least one pair of conductors (Sample: figure 1b) to denote a cable length; programming the emulator to input a test pattern (Lin: figure 13) to the cable (Sample: column 13, lines 21-24); programming the emulator to collect an output data pattern from the cable that results from the test pattern; determining the cable length from the output pattern (Sample: column 13, lines 36-40); compiling the emulation program to account for each interchanged pair of conductors.

**Claim 2:** An in situ method for determining the length (Sample: column 13, lines 21-24) of the cable as in claim 1 wherein said test pattern is a pattern of alternating binary "1s" and "0s" (Lin: figure 13 and column 4, lines 34-37, 48-65)

**Claim 3:** An in situ method for determining the length of the cable (Sample: column 13, lines 21-24) as in claim 1 wherein one cable length is denoted by having no interchanged pair of conductors (Lin: column 33, lines 30-38).

**Claim 4:** An in situ method for determining the length of the cable (Sample: column 13, lines 21-24) as in claim 2 wherein one cable length is denoted by having no interchanged pair of conductors (Lin: column 33, lines 30-38).

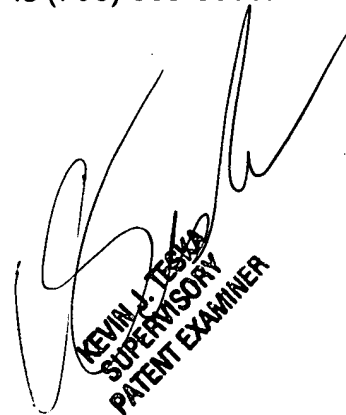
***Correspondence Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Stevens whose telephone number is (703) 305-0365, Monday-Friday (8:30 am- 5:30 pm) or contact Supervisor Mr. Kevin Teska at (703) 305-9704. The fax number for the group is 703-872-9306.

Any inquires of general nature or relating to the status of this application should be directed to the Group receptionist whose phone number is (703) 305-3900.

March 18, 2004

THS



KEVIN J. TESKA  
SUPERVISORY  
PATENT EXAMINER